

UTAH STORM WATER ADVISORY COMMITTEE
MEETING MINUTES FEBRUARY 10,2004

List of Attendees:

Board Members Present:

Greg Beckstrom, Provo City, Utah County, Committee Chair
Paul Taylor, Woods Cross City, Davis County, Committee Vice Chair
Dan Woodbury, Sandy City, Salt Lake County
Laura Haskell, West Jordan City, Salt Lake County
Kim Wallace, Davis County
George S. Burbidge, Weber County
Terry Way, Salt Lake County
Bill Young, Logan City, Cache County
Mark Franc, Bountiful City, Davis County
Gene Bingham, Harrisville City, Weber County
Gary Kerr, North Ogden City, Weber County
Don Peterson, Lindon City, Utah County
Steve Johnson, Orem City, Utah County

Other MS4 Representatives:

Derrick Radke, Summit County
Tom Beesley, Riverton City
Richard Hatfield, Provo City
Jim Caldwell, Hill AFB
Paul Betts, Hill AFB
Gary Cahoon, Farmington City

Private Industry/Organizations:

Nathan Daus, UACD
Lisa Kirschner, Parsons Behle & Latimer

State Representatives:

Dave Rupp, Water Quality
Candace Cady, Water Quality
Mike George, Water Quality
Tom Rushing, Water Quality
Gayle Smith, Water Quality

First Order of Business:

Greg Beckstrom started the meeting with a discussion of the proposed mission statement for the committee. He expressed a concern for some of the language in the statement and suggested that the coalitions review the statement in their monthly meeting and propose any changes in the next meeting of the SWAC.

Dave Rupp (DWQ) led a discussion concerning State requirements for design evaluation of storm water treatment systems. It was stressed that the design evaluation requirements are not related to the UPDES program. A chart of the State structure was passed out to those attending showing the structure of the different sections within the Division.

The policy for the current system under these permits is to require detention requirements for any system, which is designed to collect 5 cubic feet per second of flow. Dave indicated that the state would like to change this policy from the 5 cfs criteria to acreage-based criteria. These requirements would be for new construction projects. The current DWQ policy for the design evaluation permit is below:

STORM DRAINAGE SYSTEMS MINIMUM DESIGN CRITERIA

FOR A WATER QUALITY CONSTRUCTION PERMIT

Regulated design flow - five cubic feet per second (cfs) or more.

Storm water detention basins and drainage system should be designed for at least 25 years of service, considering area wide master plans for land use and development. New storm drainage systems at the estimated 25th year of service, with a peak end-of-pipe discharge of 5 cfs or greater, for the 10-year, 24-hr duration storm intensity must obtain a permit. Storm waters with significant pollution potential for receiving waters may also be required to obtain a permit. If a new drainage system is proposed to convey storm water to a water body, the flow must usually include an in-line oil skimming/sedimentation structure as a minimum water treatment. Detention basins are preferred.

Evaluated storm intensity - 10-year, 24-hour duration.

Storm water detention basins and skimming/sedimentation structures must have adequate capacity during the entire flow period (discharge) of the above storm. Detention basins must baffle oil and floatable material from being discharged and adequately detain the flow for a minimum of 30-minutes to create sedimentation. Pipe in-line skimming/sedimentation structures must effectively skim oil and allow sedimentation during the flow period.

Oil and grease discharge prevention:

The discharge of oil and grease must be controlled by siphons, skimmers, baffling, or other approved means. Detention basin outlets and where necessary, smaller in-line structures should

be designed to significantly reduce such discharge from the 10-year 24-hour and smaller storms. Detention basins are discussed below.

Construction Details and Capacity of Detention basins:

1. A minimum hydraulic detention time of 30 minutes must be provided in detention basins up to the 10-year 24-hour storm. Detention times for the storms larger than the 10-year 24-hour event are exempt. Basins and outlets shall be designed to meet the requirement, and still control the design storm for flooding specified for each basin. Detention time for basins with discharging bottom outlets should be estimated graphically. This is done by graphing cumulative inflow and outflow volume vs. time. The time between the cumulative volume of inflow and the corresponding cumulative volume of outflow at any time on the graph is defined as the detention time. The required detention time should be met at any time on the graph for the 10-year 24-hour storm.
2. The inlet and outlet design must include erosion protection. Outlets must be baffled and will have a minimum of six to twelve-inch depth that cannot be discharged into the outlet. This is to retain oil, other floatable material and sediments.
3. Minimum freeboard of 2 feet is recommended.
4. A maximum water depth of 10 feet is recommended.
5. Embankment side slopes should be 3-feet horizontal to 1-foot vertical [3:1] or flatter.
6. Design of the inlet and outlet structures must minimize short circuiting in detention basins, i.e., inlet and outlet must be spaced properly in terms of distance and orientation to improve settling.

Terry Way asked how these design requirements fit into the TMDL program and whether or not this is a duplication of effort.

Paul Taylor pointed out that the UPDES storm water program is designed to give credit for implementing up gradient source controls and questioned how the requirement for end of pipe treatment fit in with these goals? Lisa Kirschner agreed with the statement and relayed that the new wave for dealing with polluted inputs from storm water is to deal with it through pollution prevention controls instead of with direct treatment. George Burbidge also agreed with the conflict of having the UPDES program and a separate program for storm water treatment design permits.

Lisa Kirschner asked where the regulations state that the design evaluation permit is required. Dave Rupp responded that the requirements is found in the Utah Administrative Code UAC R-317-1. Dave also stated that the primary control needed for this treatment system is to provide treatment for sediment and for oil and grease.

Terry Way stated that the maintenance of these required systems is a problem. Greg Beckstrom indicated that the design evaluation permits were a proactive way to deal with storm water pollution on the state's behalf prior to the NPDES storm water regulations but may not be needed any more.

Lisa Kirschner stated the fundamental question regarding the storm water design evaluation requirements is the legal authority the State has to impose them.

Karen Nichols asked what data is used to determine treatment specifications. Dave answered that specific data was not used to create the treatment criteria and that there is no required monitoring.

Greg Beckstrom indicated that it would be good to pass out a copy of the current construction policy to the group members. Hill AFB asked what standards are adhered to and that a concentration is needed for a goal.

Tom Rushing discussed the annual report requirements which are due by Oct. 1, 2004 for most of the phase II permittees. An outline of the requirements was passed out and discussed. The general outline for the reports is below. It should be noted that the reports must also be signed and certified as per the UPDES permit.

UPDES Storm Water Annual Report

Questions and Answers

1. What should be included in my annual report?

The annual report should include 6 parts. A general outline of the expected annual report inclusions is below.

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| <i>Part I</i> | <i>Current Copy of the Storm Water Management Program for the MS4.</i> |
| <i>Part II</i> | <i>A list and explanation of BMP's that have been implemented since the issuance of the permit. The explanation should include date implemented and which minimum control measure(s) is addressed through implementation. If it is a longer-term implementation plan then include an explanation of the status and phases of implementation.</i> |
| <i>Part III</i> | <i>An assessment of the effectiveness of implemented BMP's. This section should include an explanation of the methodology to determine the effectiveness of the BMP's or a schedule for implementing and reporting measurable goals.</i> |
| <i>Part IV</i> | <i>Annual expenditures for permit compliance since the issuance of the permit. This section should include a fairly detailed breakdown of monies spent to implement and measure effectiveness of BMP's. The expenditures should include salary amounts for employees or may be reported in time hours spent by staff in implementation.</i> |
| <i>Part V</i> | <i>Summary describing activities progress and accomplishments for each of the control measures. This section should include a full explanation of implemented</i> |

BMP's as well as other activities that have occurred. The format should list all six control measures and list the accomplishments.

Part VI Five-year implementation schedule for the Storm Water Management Program. This section is required with the first annual report only. This should include a detailed plan from the beginning of program implementation through the end of the permit cycle when a final program should be completed and implemented. The detail should include a justification for program implementation including a justification for prioritizing certain elements earlier in the program. Elements of the program that are being implemented need only be listed by year. It is the expectation of DWQ that these items will be reported as implemented on the following annual report. It is expected that permitted municipalities will implement the programs with good faith. Failure to include a "reasonable" schedule of BMP's and timeframes will result in comments of deficiency from DWQ. Failure to update the requirements and work in good faith with DWQ will result in an enforcement action and administrative order from the Executive Secretary of the Water Quality Board.

2. When is the annual report due?

The annual report is due to be submitted to DWQ no later than October 1, 2004. The report should be sent to the address below:

*Utah Division of Water Quality
Attn: Tom Rushing
288 North 1460 West
P.O. Box 144870
Salt Lake City, UT 84114-4870*

3. Should my report include any attachments such as maps or monitoring data, etc.?

The inclusion of additional materials such as storm drain maps, land use maps, handout materials etc. is not required to be appended to the report, however, if these materials are available a copy appended to the report will be appreciated. Items such as monitoring data should be summarized on a table.

4. Should I expect a response from DWQ? If so, when will I receive a response?

A response form letter will be sent out within 30 days of DWQ's receipt of the annual report stating that the report was received. Additional correspondence may follow only if DWQ has noted a deficiency(ies) in the report. DWQ tracks all submissions and correspondence on a database.

There was also some discussion on whether or not the state should prepare a standardized form in conjunction with the advisory committee. This will be discussed in the next meeting.

The next item on the agenda was brought forward by George Burbidge concerning the goals and objectives to be obtained by the committee. As a result of this discussion it was decided that a goal would be stated by each of the phase II urbanized areas and one by the State. These goals will be followed up on as necessary. The goal for each area is stated below.

Weber County – Inspector Training (for local sw inspectors)

Davis County – Ordinance Development

Salt Lake County – Website Development

Cache County – Standard BMP Details

Utah County – Contractor Relationship (include training for building inspectors)

State – DEQ Program Coordination/Information to Committee

Candace Cady with the State Division of Water Quality will give a presentation during the next meeting to cover the State requirements for underground injection control permits.

Feedback concerning the committee mission statement should be given to Kim Wallace in preparation of the final statement.

Next meeting is scheduled for March 9, 2004, Room 114, Cannon Health Bldg., 288 N. 1460 W., Salt Lake City.